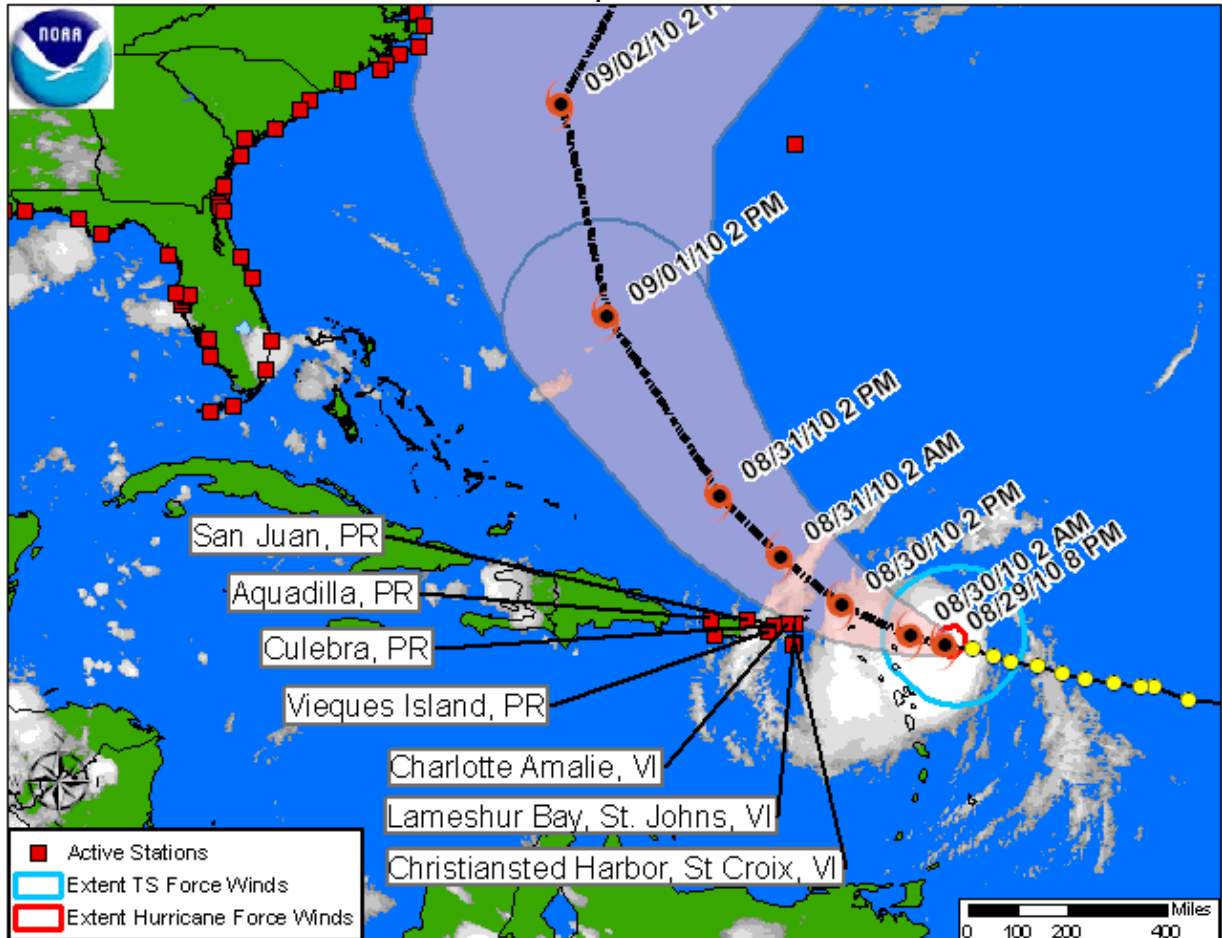




Hurricane EARL QuickLook
Posted: 00:00 AST 08/30/2010

NOAA and NOAA Partnership Stations Relative to the Storm



Storm Analysis

As of 08/30/2010 00:00 EDT, water levels across the U.S. Virgin Islands and Puerto Rico are about 0.3 to 0.6 feet above predictions.

Wind speeds have been steadily increasing and are generally ranging from 5 to 10 kts with some gusts up to 20 kts. Barometric pressures continue to decrease across the region.

Water Level and Meteorological plots available below are updated automatically. Water level predictions relative to Mean Lower Low Water are:

CHRISTIANSTED HARBOR, ST CROIX, VI: Next predicted high tides are 0.62 ft (0.19 m) at 08/30/2010 13:18 AST and 0.66 ft (0.20 m) at 08/31/2010 14:53 AST.

LAMESHUR BAY, ST. JOHN, VI: Next predicted high tides are 0.45 ft (0.14 m) at 08/30/2010

00:14 AST and 0.72 ft (0.22 m) at 08/30/2010 00:14 AST.

CHARLOTTE AMALIE, VI: Next predicted high tides are 0.82 ft (0.25 m) at 08/30/2010 14:50 AST and 0.88 ft (0.27 m) at 08/30/2010 14:50 AST.

CULEBRA, PR: Next predicted high tides are 0.70 ft (0.21 m) at 08/30/2010 00:22 AST and 0.94 ft (0.29 m) at 08/30/2010 00:22 AST.

ESPERANZA, VIEQUES ISLAND, PR: Next predicted high tides are 0.54 ft (0.16 m) at 08/30/2010 16:40 AST and 0.63 ft (0.19 m) at 08/31/2010 17:31 AST.

SAN JUAN, PR: Next predicted high tides are 1.16 ft (0.35 m) at 08/30/2010 00:29 AST and 1.58 ft (0.48 m) at 08/30/2010 00:29 AST.

AGUADILLA, PR: Next predicted high tides are 1.00 ft (0.30 m) at 08/30/2010 00:10 AST and 1.31 ft (0.40 m) at 08/30/2010 00:10 AST.

For additional data, please see the [Center for Operational Oceanographic Products & Services](#) website. For more information or archived products and reports, please see the [Storm QuickLook](#) homepage.

Analyst:WFR

SELECT NATIONAL HURRICANE CENTER ADVISORY INFORMATION:

HURRICANE EARL ADVISORY NUMBER 19 1100 PM AST SUN AUG 29 2010

...EARL STRENGTHENS AS IT APPROACHES THE NORTHERNMOST LEEWARD ISLANDS...

CURRENT LOCATION: ABOUT 50 MI ENE OF BARBUDA, ABOUT 130 MI E OF ST. MARTIN

WATCHES AND WARNINGS

A HURRICANE WATCH IS IN EFFECT FOR...

*** U.S. VIRGIN ISLANDS**

*** PUERTO RICO INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES**

A TROPICAL STORM WARNING IS IN EFFECT FOR...

*** U.S. VIRGIN ISLANDS**

*** PUERTO RICO INCLUDING THE ISLANDS OF CULEBRA AND VIEQUES**

HURRICANE CONDITIONS ARE EXPECTED WITHIN THE HURRICANE WARNING AREA...IN THIS CASE WITHIN THE NEXT 12 TO 24 HOURS. PREPARATIONS TO PROTECT LIFE AND PROPERTY SHOULD HAVE ALREADY BEEN COMPLETED.

HURRICANE CONDITIONS ARE POSSIBLE WITHIN THE WATCH AREA...IN THIS CASE WITHIN THE NEXT 24 TO 36 HOURS.

DISCUSSION AND 48-HOUR OUTLOOK

AT 1100 PM AST EARL IS MOVING TOWARD THE WEST-NORTHWEST NEAR 15 MPH AND THIS GENERAL MOTION IS EXPECTED TO CONTINUE DURING THE NEXT DAY OR SO. A TURN TOWARD THE NORTHWEST IS EXPECTED BY EARLY TUESDAY. ON THE FORECAST TRACK...THE CENTER OF EARL WILL PASS NEAR OR OVER THE NORTHERNMOST LEEWARD ISLANDS LATE TONIGHT AND EARLY MONDAY.

OBSERVATIONS FROM AN AIR FORCE HURRICANE HUNTER PLANE INDICATE THAT MAXIMUM SUSTAINED WINDS HAVE INCREASED TO NEAR 100 MPH WITH HIGHER GUSTS. EARL IS A CATEGORY TWO HURRICANE ON THE SAFFIR-SIMPSON WIND SCALE. FURTHER STRENGTHENING IS FORECAST...AND EARL IS EXPECTED TO BECOME A MAJOR HURRICANE BY LATE MONDAY.

HURRICANE FORCE WINDS EXTEND OUTWARD UP TO 45 MILES FROM THE CENTER...AND TROPICAL STORM FORCE WINDS EXTEND OUTWARD UP TO 175 MILES.

HAZARDS AFFECTING LAND

WIND...TROPICAL STORM CONDITIONS ARE ABOUT TO SPREAD INTO PORTIONS OF THE HURRICANE WARNING AREA...AND HURRICANE CONDITIONS ARE EXPECTED TO SPREAD INTO THE HURRICANE WARNING AREA ON MONDAY. TROPICAL STORM CONDITIONS ARE EXPECTED TO SPREAD OVER THE U.S. VIRGIN ISLANDS AND PUERTO RICO ON MONDAY...WITH HURRICANE CONDITIONS POSSIBLE MONDAY NIGHT.

STORM SURGE...STORM SURGE WILL RAISE WATER LEVELS BY AS MUCH AS 2 TO 4 FEET ABOVE GROUND LEVEL PRIMARILY NEAR THE COAST IN AREAS OF ONSHORE WIND WITHIN THE HURRICANE WARNING AREA...AND 1 TO 3 FEET IN THE TROPICAL STORM WARNING AREA. THE SURGE WILL BE ACCOMPANIED BY LARGE AND DANGEROUS BATTERING WAVES.

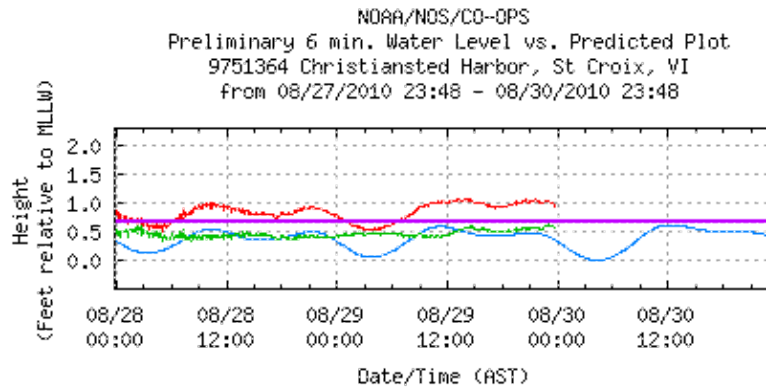
RAINFALL...EARL IS EXPECTED TO PRODUCE TOTAL RAINFALL ACCUMULATIONS OF 3 TO 5 INCHES OVER MUCH OF THE NORTHERN LEEWARD ISLANDS...WITH POSSIBLE ISOLATED MAXIMUM AMOUNTS OF 8 INCHES. RAIN ACCUMULATIONS OF 4 TO 6 INCHES ARE EXPECTED OVER PUERTO RICO...WITH ISOLATED MAXIMUM AMOUNTS OF 12 INCHES POSSIBLE OVER HIGHER ELEVATIONS. THESE RAINS COULD CAUSE LIFE-THREATENING FLASH FLOODS AND MUDSLIDES.

FORECASTER PASCH/KIMBERLAIN

For the purpose of timely release, data contained within this QuickLook have undergone a "limited" NOS Quality Assurance/Control; however, the data have not yet undergone final verification. All data subject to NOS verification.

Jump to: [Christiansted Harbor, St Croix - Water Level](#), [Christiansted Harbor, St Croix - Winds](#), [Christiansted Harbor, St Croix - Barometric](#), [Christiansted Harbor, St Croix - Air/Water Temp](#), [Lameshur Bay, St. John - Water Level](#), [Lameshur Bay, St. John - Air/Water Temp](#), [Charlotte Amalie - Water Level](#), [Charlotte Amalie - Winds](#), [Charlotte Amalie - Barometric](#), [Charlotte Amalie - Air/Water Temp](#), [Culebra - Water Level](#), [Culebra - Winds](#), [Culebra - Barometric](#), [Culebra - Air/Water Temp](#), [Esperanza, Vieques Island - Water Level](#), [Esperanza, Vieques Island - Winds](#), [Esperanza, Vieques Island - Barometric](#), [Esperanza, Vieques Island - Air/Water Temp](#), [San Juan - Water Level](#), [San Juan - Winds](#), [San Juan - Barometric](#), [San Juan - Air/Water Temp](#), [Aguadilla - Water Level](#), [Aguadilla - Barometric](#), [Aguadilla - Air/Water Temp](#),

Christiansted Harbor, St Croix, VI - [Return to List](#)



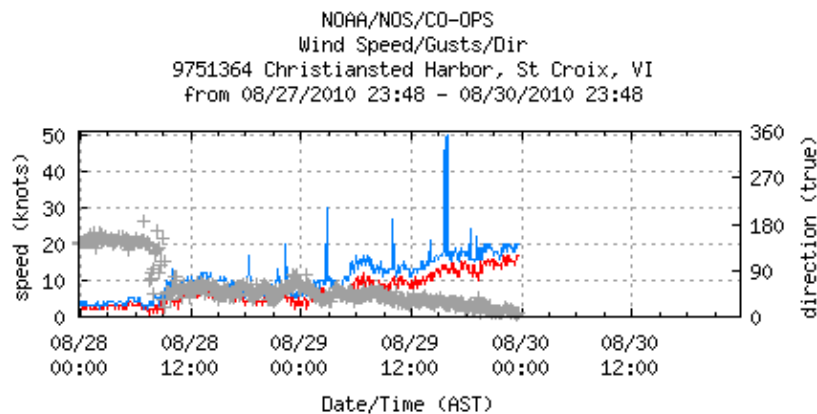
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/29/2010 23:36 (AST)

Relative to **MLLW**: **Observed: 0.95 ft. Predicted: 0.37 ft. Residual: 0.58 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.73 ft. above **MHHW**

Christiansted Harbor, St Croix, VI - [Return to List](#)

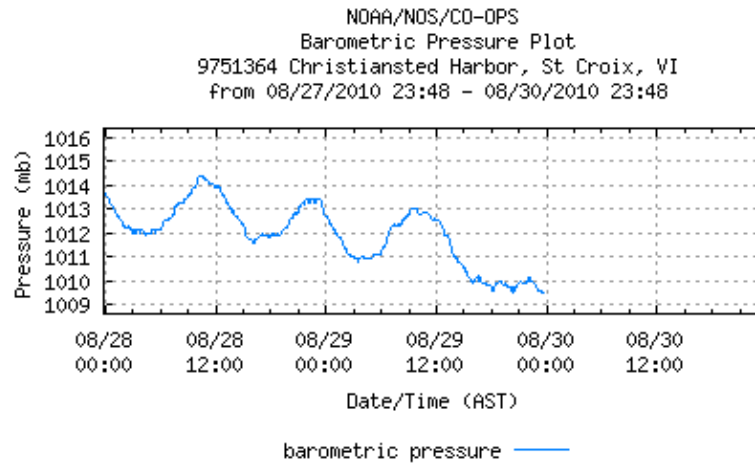


speed — gusts — direction +

Last Observed Sample: 08/29/2010 23:36 (AST)

Wind Speed: 17 knots Gusts: 20 knots Direction: 007° T

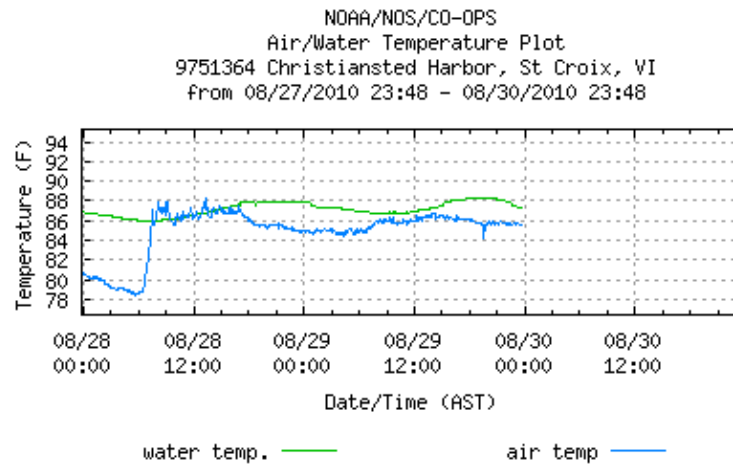
Christiansted Harbor, St Croix, VI - [Return to List](#)



Last Observed Sample: 08/29/2010 23:36 (AST)

Barometric Pressure: 1009.5 mb

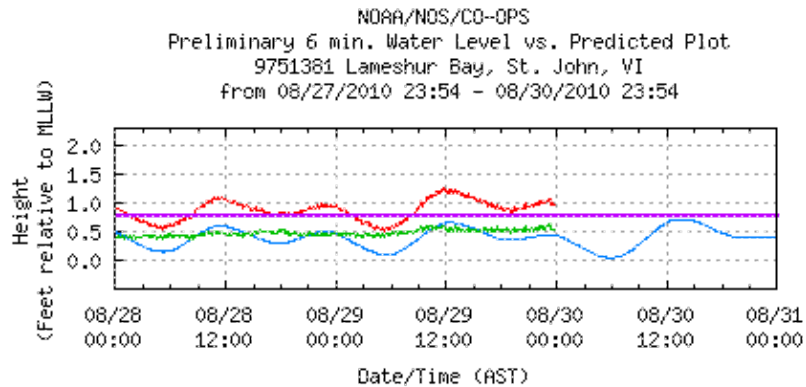
Christiansted Harbor, St Croix, VI - [Return to List](#)



Last Observed Sample: 08/29/2010 23:36 (AST)

Water Temperature: 87.4° F Air Temperature: 85.6° F

Lameshur Bay, St. John, VI - [Return to List](#)

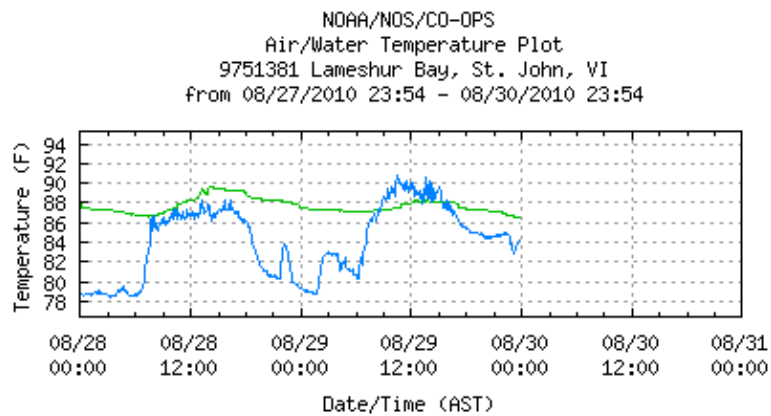


Last Observed Sample: 08/29/2010 23:42 (AST)

Relative to **MLLW**: **Observed: 0.98 ft.** **Predicted: 0.44 ft.** **Residual: 0.54 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.83 ft. above **MHHW**

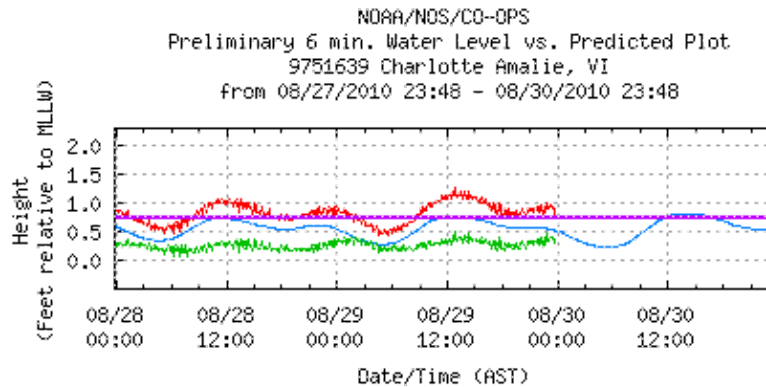
Lameshur Bay, St. John, VI - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Water Temperature: 86.5° F **Air Temperature: 84.2° F**

Charlotte Amalie, VI - [Return to List](#)

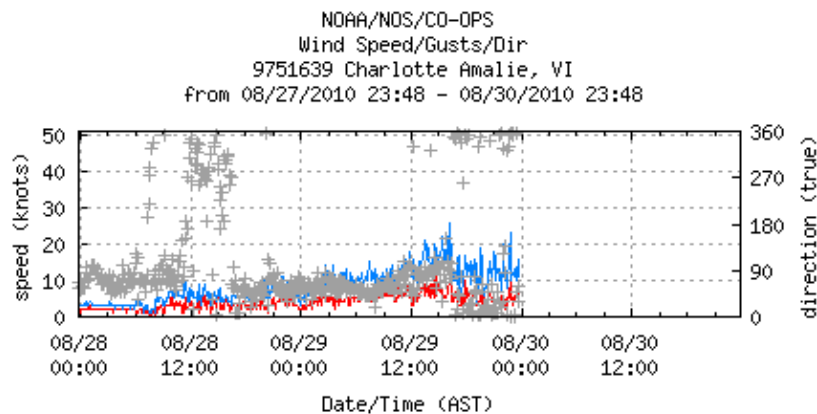


Last Observed Sample: 08/29/2010 23:42 (AST)

Relative to **MLLW**: **Observed: 0.82 ft.** **Predicted: 0.52 ft.** **Residual: 0.30 ft.**

Historical Maximum Water Level: Sep 16 1995, 2.93 ft. above **MHHW**

Charlotte Amalie, VI - [Return to List](#)

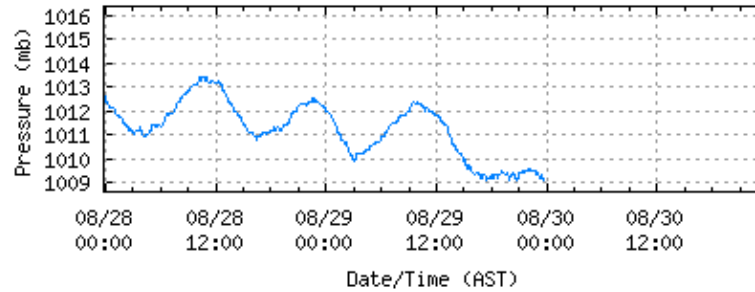


Last Observed Sample: 08/29/2010 23:42 (AST)

Wind Speed: 4 knots **Gusts: 11 knots** **Direction: 060° T**

Charlotte Amalie, VI - [Return to List](#)

NOAA/NOS/CO-OPS
Barometric Pressure Plot
9751639 Charlotte Amalie, VI
from 08/27/2010 23:48 - 08/30/2010 23:48



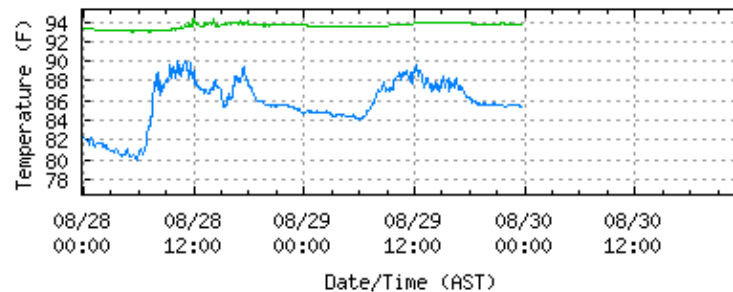
barometric pressure —

Last Observed Sample: 08/29/2010 23:42 (AST)

Barometric Pressure: 1009.1 mb

Charlotte Amalie, VI - [Return to List](#)

NOAA/NOS/CO-OPS
Air/Water Temperature Plot
9751639 Charlotte Amalie, VI
from 08/27/2010 23:48 - 08/30/2010 23:48

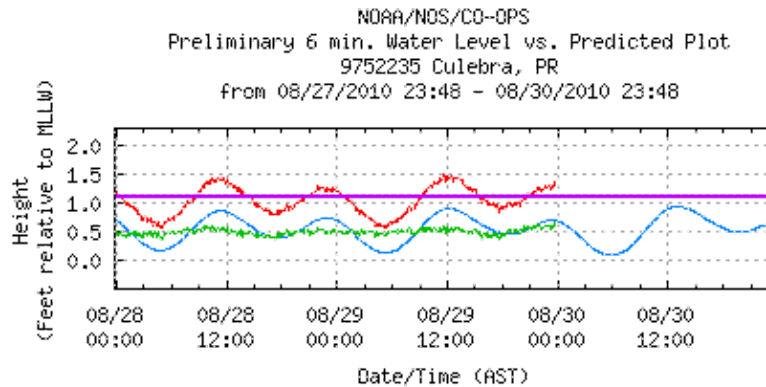


water temp. — air temp —

Last Observed Sample: 08/29/2010 23:42 (AST)

Water Temperature: 93.8° F Air Temperature: 85.4° F

Culebra, PR - [Return to List](#)



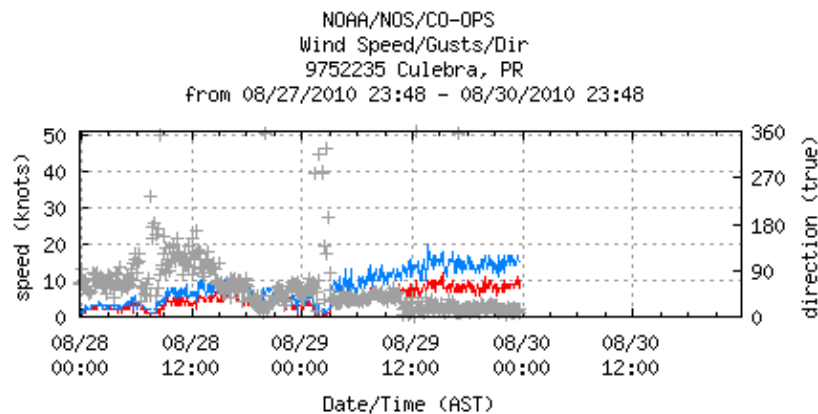
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/29/2010 23:42 (AST)

Relative to **MLLW**: **Observed: 1.30 ft.** **Predicted: 0.69 ft.** **Residual: 0.61 ft.**

Historical Maximum Water Level: Nov 6 2006, 0.86 ft. above **MHHW**

Culebra, PR - [Return to List](#)

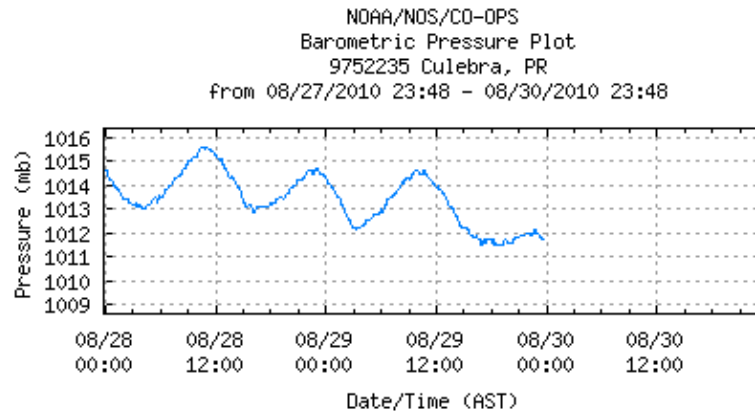


speed — gusts — direction +

Last Observed Sample: 08/29/2010 23:42 (AST)

Wind Speed: 10 knots **Gusts: 15 knots** **Direction: 013° T**

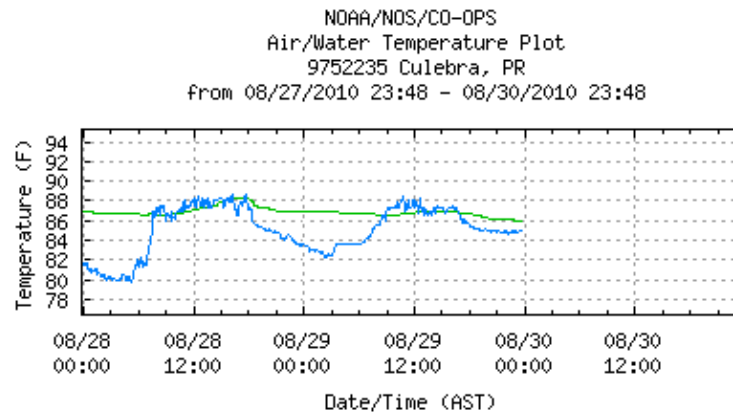
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Barometric Pressure: 1011.7 mb

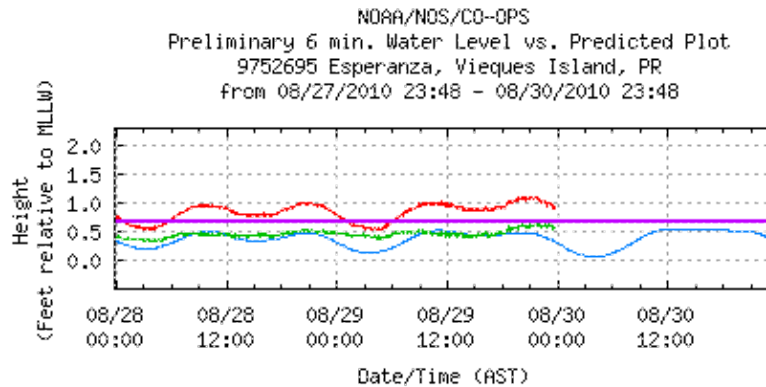
Culebra, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Water Temperature: 86.0° F Air Temperature: 84.9° F

Esperanza, Vieques Island, PR - [Return to List](#)



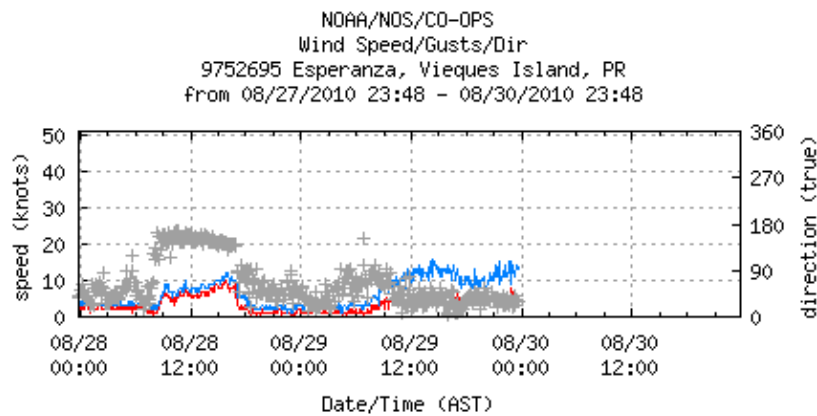
Predicted WL — (Obs-Pred) —
Observed WL — MHHW —

Last Observed Sample: 08/29/2010 23:42 (AST)

Relative to **MLLW**: **Observed: 0.90 ft.** **Predicted: 0.33 ft.** **Residual: 0.57 ft.**

Historical Maximum Water Level: Oct 13 2006, 0.83 ft. above **MHHW**

Esperanza, Vieques Island, PR - [Return to List](#)

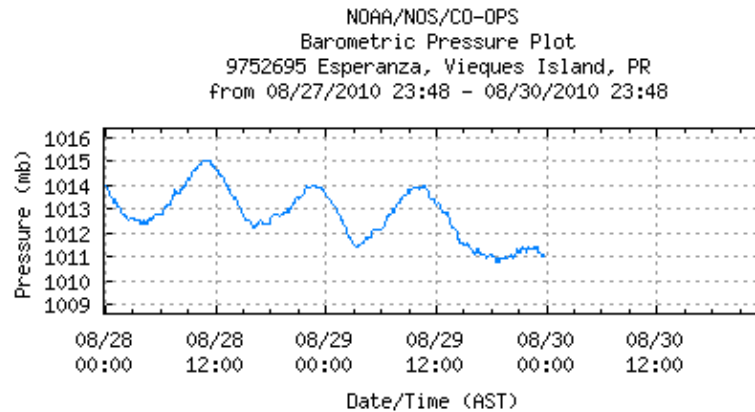


speed — gusts — direction +

Last Observed Sample: 08/29/2010 23:42 (AST)

Wind Speed: 5 knots **Gusts: 13 knots** Direction: 031° T

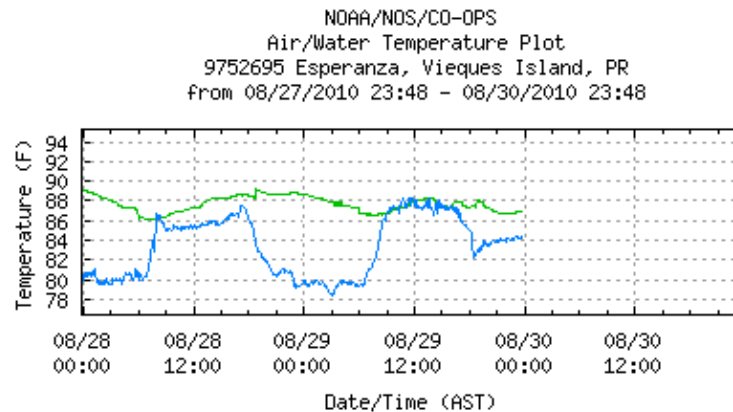
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Barometric Pressure: 1011.1 mb

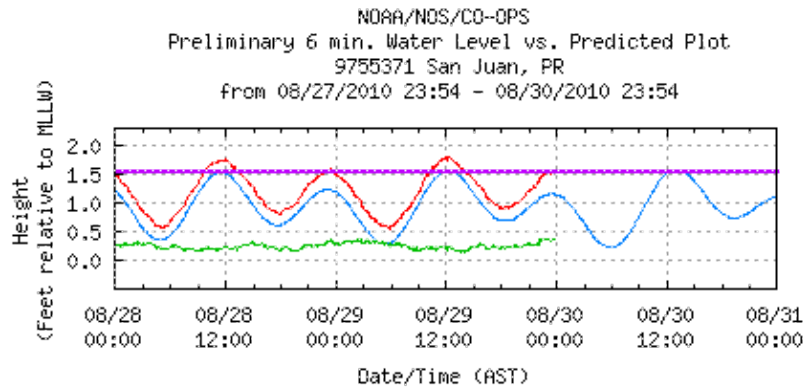
Esperanza, Vieques Island, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Water Temperature: 86.9° F Air Temperature: 84.4° F

San Juan, PR - [Return to List](#)

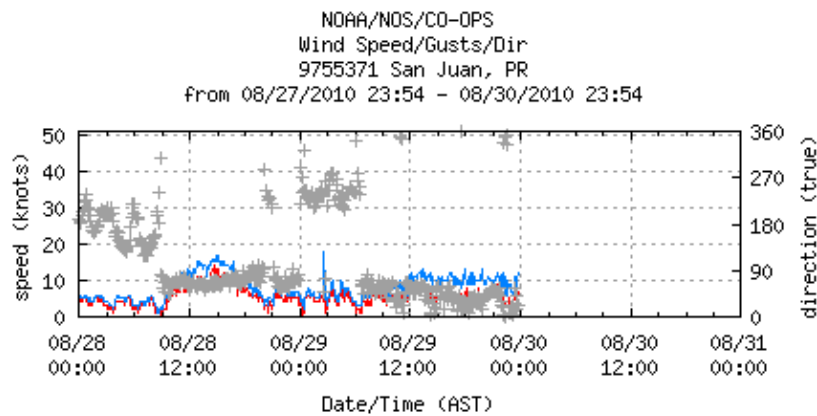


Last Observed Sample: 08/29/2010 23:42 (AST)

Relative to **MLLW**: **Observed: 1.52 ft. Predicted: 1.16 ft. Residual: 0.36 ft.**

Historical Maximum Water Level: Sep 21 1998, 1.21 ft. above **MHHW**

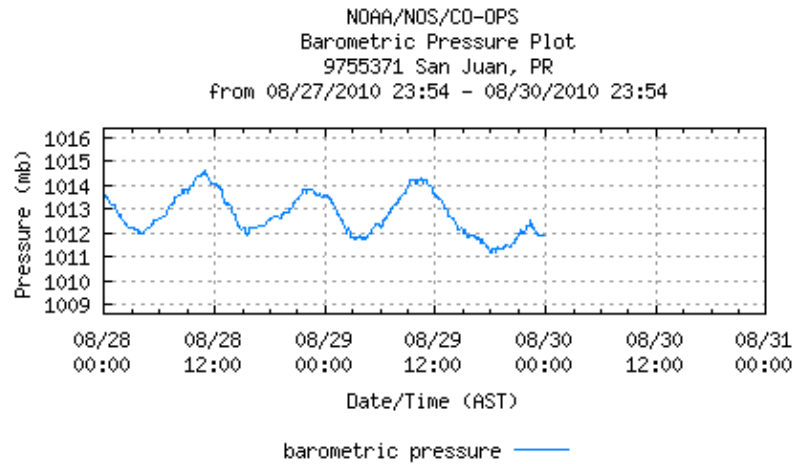
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Wind Speed: 6 knots Gusts: 12 knots Direction: 021° T

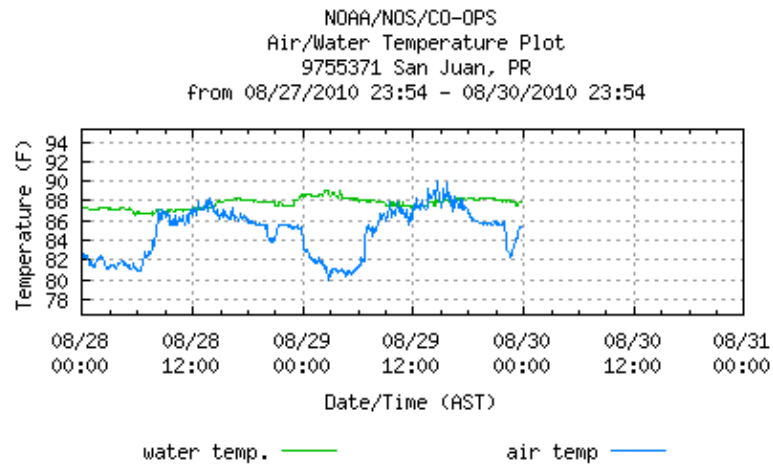
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Barometric Pressure: 1011.9 mb

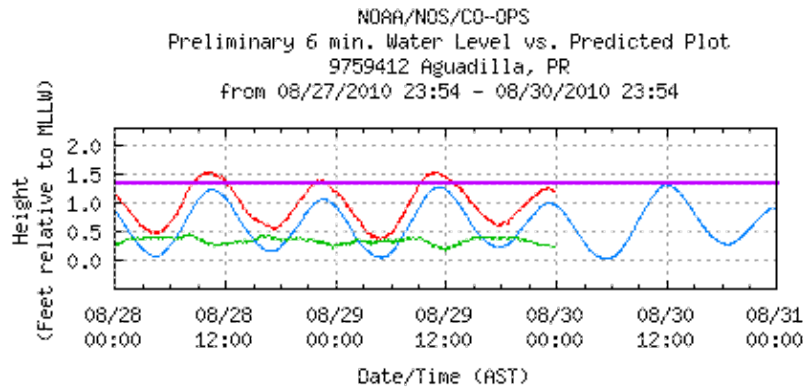
San Juan, PR - [Return to List](#)



Last Observed Sample: 08/29/2010 23:42 (AST)

Water Temperature: 87.8° F Air Temperature: 85.3° F

Aguadilla, PR - [Return to List](#)

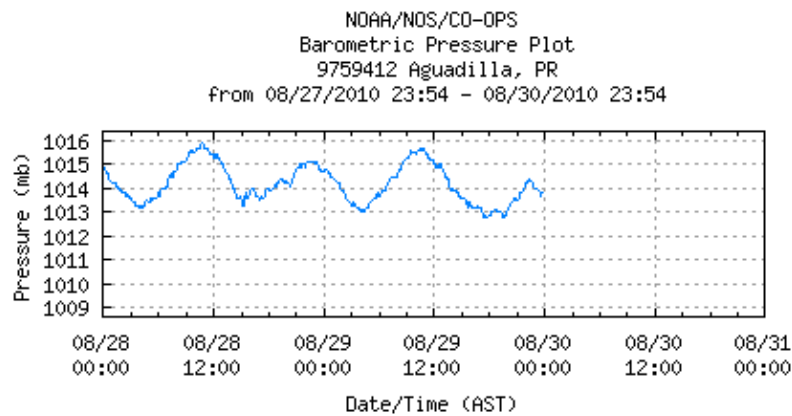


Last Observed Sample: 08/29/2010 23:42 (AST)

Relative to **MLLW**: **Observed: 1.21 ft. Predicted: 0.97 ft. Residual: 0.24 ft.**

Historical Maximum Water Level: Oct 28 2007, 0.95 ft. above **MHHW**

Aguadilla, PR - [Return to List](#)

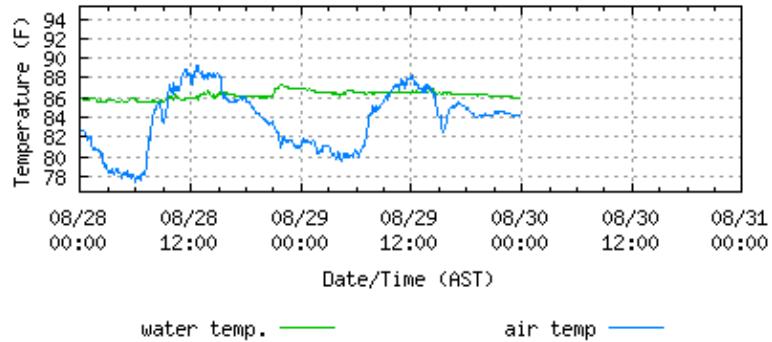


Last Observed Sample: 08/29/2010 23:42 (AST)

Barometric Pressure: 1013.8 mb

Aguadilla, PR - [Return to List](#)

NOAA/NOS/CO-OPS
Air/Water Temperature Plot
9759412 Aguadilla, PR
from 08/27/2010 23:54 - 08/30/2010 23:54



Last Observed Sample: 08/29/2010 23:42 (AST)

Water Temperature: 86.0° F Air Temperature: 84.2° F

Center for Operational Oceanographic Products & Services (CO-OPS) | National Ocean Service (NOS)
National Oceanic and Atmospheric Administration | U.S. Department of Commerce